What is claimed is:

1. A transmission power control apparatus comprising:

extraction means for extracting a transmission power control signal from a reception signal containing a transmission power control signal;

storage means for sequentially storing transmission power control signals output from said extraction means;

first determination means for determining whether an instruction to increase/decrease transmission power based on a plurality of transmission power control signals stored in said storage means is repeatedly generated; and

update stopping means for stopping transmission power updating operation if the determination result from said first determination means indicates that the transmission power is repeatedly increased/decreased.

2. An apparatus according to claim 1, wherein said extraction means, storage means, first determination means, and update stopping means are arranged in a CDMA (Code Division Multiple Access) mobile terminal.

3. An apparatus according to claim 1, wherein said apparatus further comprises second determination means for determining whether a deviation of a frequency of a reception wave due to the Doppler effect is not more than a predetermined value, if the determination result from said first determination means indicates that the transmission power is repeatedly increased/decreased, and

said update stopping means stops transmission power updating operation if the determination result from said second determination means indicates that the deviation is not more than the predetermined value.

4. An apparatus according to claim 3, wherein said extraction means, storage means, first and second determination means, and update stopping means are arranged in a CDMA (Code Division Multiple Access) mobile terminal.

5. An apparatus according to claim 3, further comprising Doppler effect measuring means for comparing a slot period of a reception signal with a reference slot period to measure a slot period deviation of a reception wave due to the Doppler effect which is produced upon movement of the terminal.

6. An apparatus according to claim 1, wherein

said first determination means determines whether a predetermined frequency component of frequency components obtained by Fourier-transforming a plurality of transmission power control signals stored in said storage means is not more than a predetermined value, and

said update stopping means stops transmission power updating operation if the determination result from said first determination means indicates that the predetermined frequency component is not more than the predetermined value.

7. A transmission power control method comprising the steps of:

extracting a transmission power control signal from a reception signal containing a transmission power control signal;

sequentially storing extracted transmission power control signals;

determining whether an instruction to increase/decrease transmission power based on a plurality of stored transmission power control signals is repeatedly generated; and

stopping transmission power updating operation if the transmission power is repeatedly increased/decreased.

8. A method according to claim 7, wherein the method further comprises the step of determining whether a deviation of a frequency of a reception wave due to the Doppler effect is not more than a predetermined value, if the transmission power is repeatedly increased/decreased, and the step of stopping comprises the step of stopping transmission power updating operation if the deviation is not more than the predetermined value.

9. A method according to claim 8, further comprising the step of comparing a slot period of a reception signal with a reference slot period to measure a slot period deviation of a reception wave due to the Doppler effect which is produced upon movement of the terminal.

10. A method according to claim 7, wherein the step of determining comprises the step of determining whether a predetermined frequency component of frequency components obtained by Fourier-transforming a plurality of stored transmission power control signals is not more than a predetermined value, and in the step of stopping, transmission power updating operation is stopped if the predetermined frequency component is not more than the predetermined value.